WHAT IS CLAIMED IS:

1. A method of writing at least a servo track in recording tracks of a disk file apparatus comprising at least one disk medium rotated by a spindle motor, a head for writing and reading the data on and from said disk medium, and at least a head moving mechanism, said disk medium having a recording surface formed with concentric recording tracks segmented into a plurality of sectors each having written therein the positioning information for said head in advance, said method comprising the steps of:

detecting the continuous vibration asynchronous with the rotational frequency of said spindle motor;

detecting the phase of the detected asynchronous continuous vibration;

determining the write start sector or the write end sector or the write start time or the write end time of each servo track based on said detected phase of the asynchronous continuous vibration; and

moving said head by said head moving mechanism on said recording surface where said head positioning information is to be written and writing said information based on said write start sector or said write end sector.

2. A method of writing a servo track for a disk file apparatus according to claim 1, further comprising the steps of:

detecting the rotational frequency of said spindle motor;

writing the head positioning information for a predetermined number of tracks in advance on said disk medium by the conventional servo track write method;

detecting the phase of the head position signal output by reading, using the same head, said predetermined number of the tracks having written therein said head positioning information; and

measuring the phase difference between the phase of said head position signal output and the phase of said asynchronous continuous vibration;

wherein said step of determining the write start sector or the write end sector includes the substep of setting a servo track write start position [(1 - fc/fr) x 180]° behind the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc < fr, and a servo track write start position [(fc/fr - 1) x 180]° ahead of the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc > fr, where fc is the frequency of said asynchronous continuous vibration and fr is the rotational frequency of said spindle motor.

3. A method of writing a servo track for a disk file apparatus according to claim 1, further comprising the steps of:

detecting the rotational frequency of said spindle motor;

writing the head positioning information for a predetermined number of tracks in advance on said disk medium by the conventional servo track write method; and

reading, using the same head, said predetermined number of the tracks having written therein said head positioning information;

wherein said step of detecting the continuous vibration asynchronous with the rotational frequency of said spindle motor includes the substep of detecting the phase of said head position signal thereby to detect said asynchronous continuous vibration;

wherein said step of determining the write start sector or the write end sector includes the substep of determining the write start sector or the write end sector includes the substep of setting a servo track write start position [(1 - fc/fr) x 180]° behind the phase of the peak amplitude of said asynchronous

continuous vibration in the case where fc < fr, and a servo track write start position [(fc/fr - 1) x 180]° ahead of the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc > fr, where fc is the frequency of said asynchronous continuous vibration and fr is the rotational frequency of said spindle motor; and

wherein said step of writing said information in said servo track includes the substeps of forming a schedule for writing information in plural ones of all the recording tracks and writing the head positioning information in said plural servo tracks in accordance with said schedule.

4. A method of writing a servo track for a disk file apparatus according to claim 3, further comprising the steps of:

detecting the phase difference between the phase detected in said step of detecting the phase of said head position signal output and the phase detected at the time of forming the preceding schedule; and

repeating the steps including and subsequent to said step of writing the head positioning information for a predetermined number of tracks in advance in said disk medium by the conventional servo track write method in the case where said phase difference exceeds a predetermined value.

5. A method of writing a servo track for a disk file apparatus according to claim 1, further comprising the steps of:

detecting the rotational frequency of said spindle motor; and

moving a reference head finely after writing therein said clock signal at the outermost peripheral portion; wherein said step of detecting the continuous vibration asynchronous with the rotational frequency of said spindle motor includes the substeps of observing the modulation of said clock signal detected

from said reference head and detecting the phase of said asynchronous continuous vibration from said observed modulation;

wherein said step of determining the write start sector or the write end sector includes the substep of determining the write start sector or the write end sector includes the substep of setting a servo track write start position [(1 - fc/fr) x 180]° behind the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc < fr, and a servo track write start position [(fc/fr - 1) x 180]° ahead of the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc > fr, where fc is the frequency of said asynchronous continuous vibration and fr is the rotational frequency of said spindle motor; and

wherein said step of writing said information includes the substeps of forming a schedule for writing information in plural ones of all the recording tracks and writing the head positioning information in accordance with said schedule.

6. A method of writing a servo track for a disk file apparatus according to claim 1, further comprising the steps of:

detecting the rotational frequency of said spindle motor;

writing the head positioning information for at least one track by a third head other than said head and said head for writing said reference signal, at a place other than the zone of said disk medium for carrying out the servo track write operation and the zone where said reference signal is written; and

reading said track having written therein said head positioning information, by means of said third head;

wherein said step of determining the asynchronous continuous vibration of the rotational

frequency of said spindle motor includes the substep of detecting said asynchronous continuous vibration by detecting the phase of the head position signal read by said third head; and

wherein said step of determining the write start sector or the write end sector includes the substep of setting a servo track write start position [(1 - fc/fr) x 180]° behind the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc < fr, and a servo track write start position [(fc/fr - 1) x 180]° ahead of the phase of the peak amplitude of said asynchronous continuous vibration in the case where fc > fr, where fc is the frequency of said asynchronous continuous vibration and fr is the rotational frequency of said spindle motor.

7. A method of writing a servo track in a recording track of a disk file apparatus comprising at least one disk medium rotated by a spindle motor, a head for writing and reading the data on and from said disk medium, and a head moving mechanism, said disk medium having a recording surface formed concentric recording tracks each segmented into a plurality of sectors each having a track having written therein the positioning information for said head in advance, said method comprising the steps of:

detecting the continuous vibration asynchronous with the rotational frequency of said spindle motor;

detecting the phase and amplitude of the detected asynchronous continuous vibration;

writing the head positioning information for a predetermined number of tracks in advance in such a manner as to satisfy the equation n(i) = (n(i - 1) + mfr/fc) mod m between adjacent servo tracks, where m is the number of servo sectors, fr the rotational frequency, fc the asynchronous continuous vibration frequency, n(i) the number of the servo sector where the ith servo track

begins to be written, and mod an operator for producing the solution of the remainder of the succeeding numerical value m;

detecting the asynchronous continuous vibration while at the same time writing said head positioning information;

detecting the phase of the head position signal output by reading with the same head said predetermined number of tracks having said head positioning information written therein;

calculating the phase difference between the head position signal output thus produced and the detection output of the phase of the asynchronous continuous vibration at the time of write operation corresponding to said head position signal output and calculating from said phase difference the unrequired vibration amplitude of the head caused by said asynchronous continuous vibration at the time of writing said head positioning information;

measuring the timing and amplitude of vibrating said head moving mechanism in such a manner as to suppress the unrequired vibration amplitude of said head; and

writing the head positioning information in said disk medium while vibrating said head moving mechanism based on said vibration timing and said vibration amplitude.